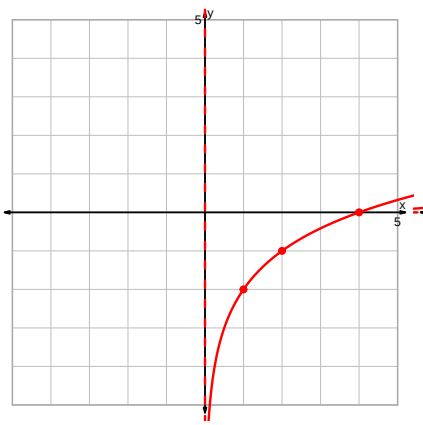
NAME: DATE:

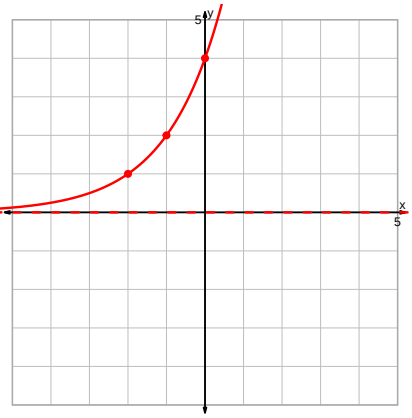
Unit-2 Reduced Mastery Assessment (version 310)

Question 1 (20 points)

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

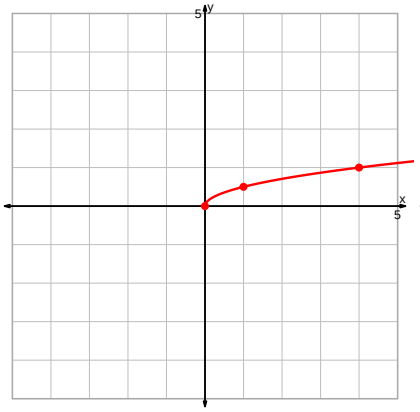
$y = \log_2(x) - 2$

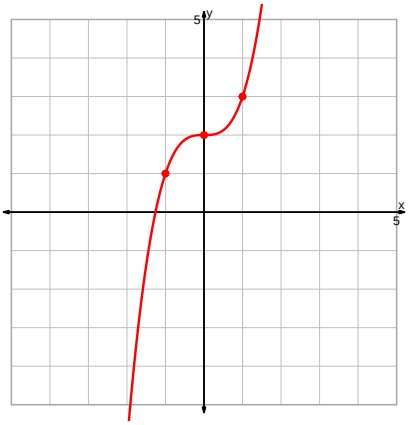




$y = 2^{x+2}$

$y = \frac{\sqrt{x}}{2}$

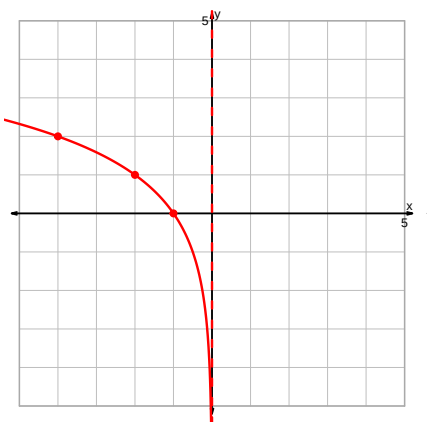


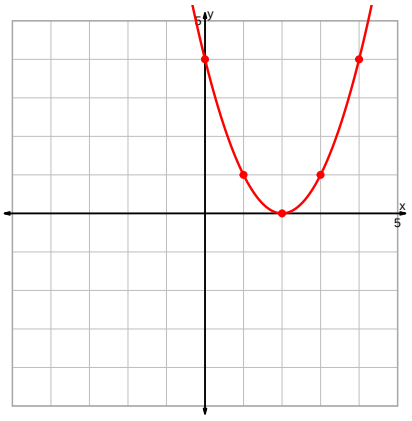


$y = x^3 + 2$

Question 2 continued. . .

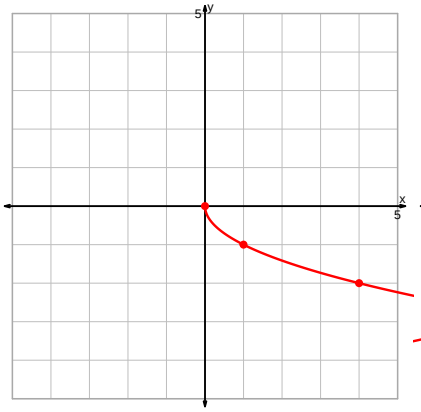
$y = \log_2(-x)$

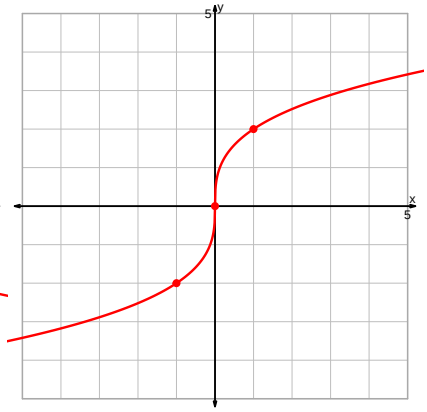




$y = (x-2)^2$

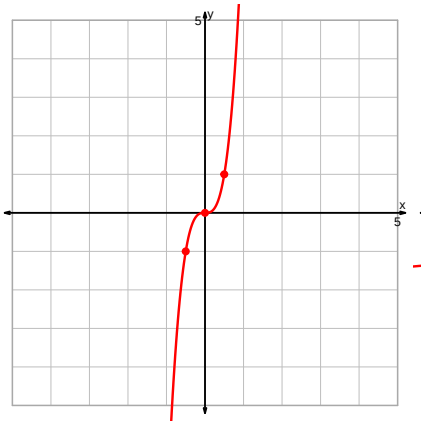
$y = -\sqrt{x}$

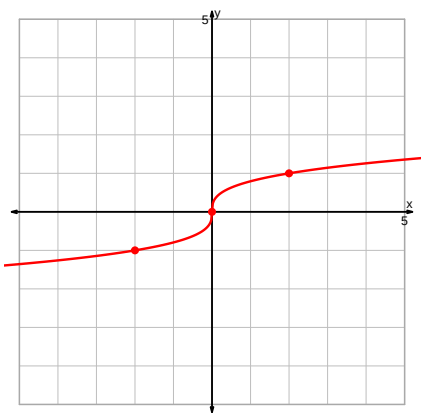




$y = 2 \cdot \sqrt[3]{x}$

$y = (2x)^3$

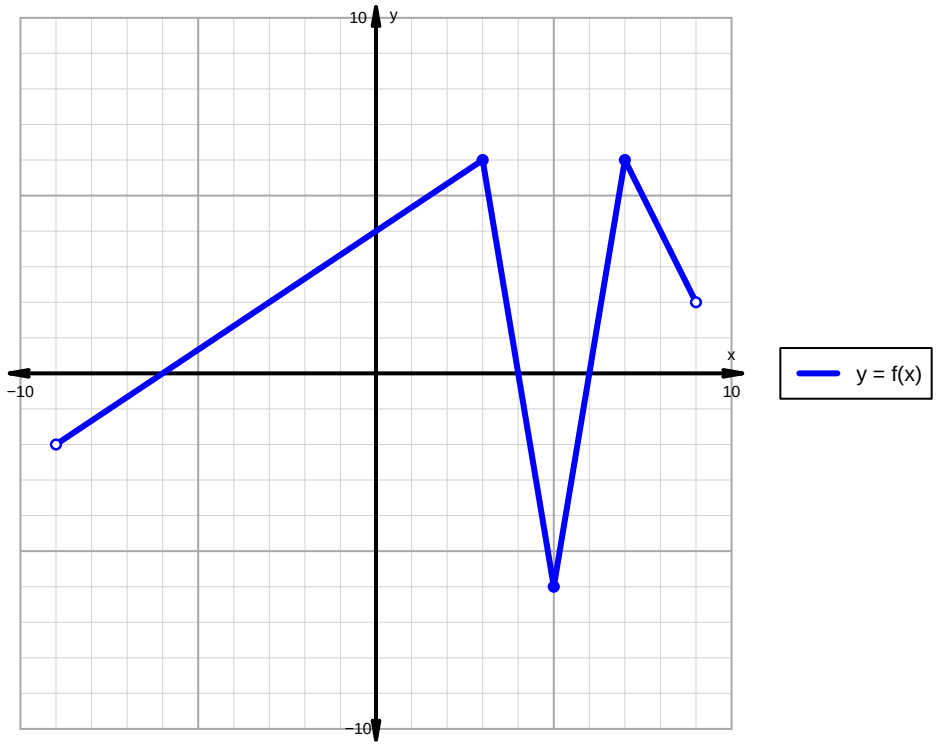




$y = \sqrt[3]{\frac{x}{2}}$

Question 2 (20 points)

A function is graphed below.



Indicate the following intervals using interval notation.

Feature	Where
Positive	$(-6, 4) \cup (6, 9)$
Negative	$(-9, -6) \cup (4, 6)$
Increasing	$(-9, 3) \cup (5, 7)$
Decreasing	$(3, 5) \cup (7, 9)$
Domain	$(-9, 9)$
Range	$(-6, 6)$